# 2: The Controller App

The Controller App is critical in hosting an event. It communicates with all the buzzers and presents an easy-to-use interface to the host, allowing them to design and control the event.

IMPORTANT: The Controller App will not load unless the controller micro:bit (see above) is connected to the hosting device (be it desktop or laptop) via USB. Please ensure it is connected before trying to follow the guide below.

## 2.1: The Interface

The Controller App uses a tabbed interface. Most of the functions required to setup and run an event will be found on different pages.

Below follows a brief overview of all the tabs (and their functions) in the app.

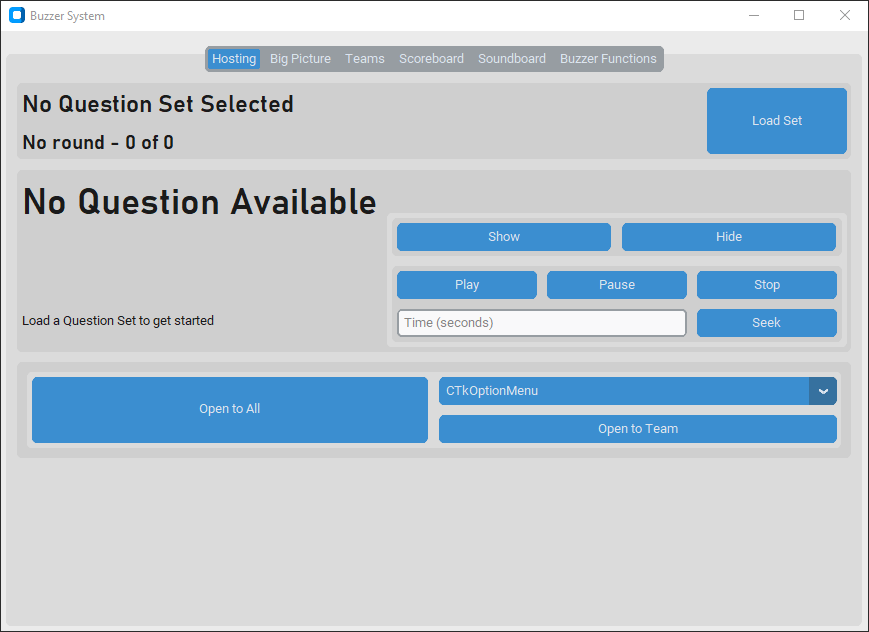
### Hosting Tab

The Hosting tab is the primary tab used to host an event.

It displays the current question (including the round, answers, notes, and aid control); the ‘Buzzer Control Frame’ (to allow the host to open, close, and lock the buzzers); and the ‘Load Set’ button (which is used to open a new question set).

The only hosting-related functions that cannot be accessed from within the Hosting tab are the live scoreboard, and soundboard.

Question Set Frame – displays the name of the current question set, and the current round. Also contains the button to load a question set.



Tab switching buttons.

Displays the current question, answer, and notes.

Question Aid Control – contains the controls for media (video, audio, or images) embed in questions.

Buzzer Control Frame – contains options to open, close or lock buzzers. The available buttons will change depending on the state of the buzzers (full guide in 2.4).

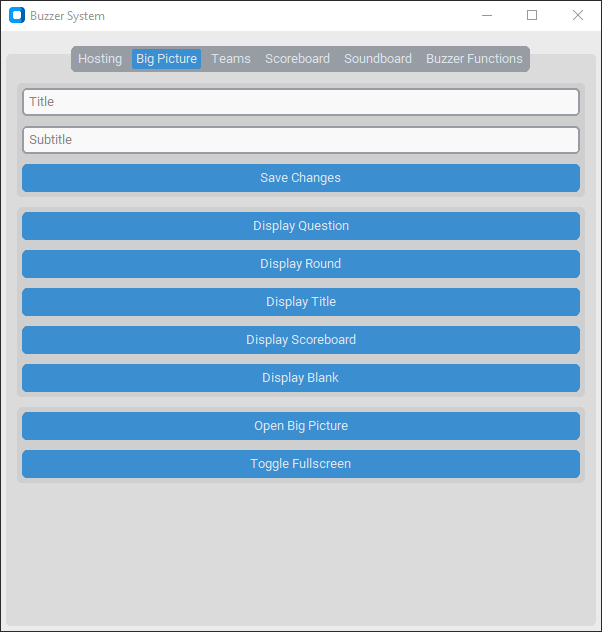
### Big Picture Configuration Tab

The Big Picture Display is the primary method of displaying the information about the game to the audience. It can be used to display a wide range of information (such as the current question, round, or live scoreboard).

This tab gives the host control over the Big Picture Display. It can be used to switch the page being displayed to the audience, as well as opening the display and setting it to be full screen.

This tab can also be used to set a title for the event, which is displayed to the audience in the ‘Title’ page.

For a full guide on using the Big Picture Display see section 2.3.



Set the title to display on the Big Picture (the button must be pressed for changes to take effect).

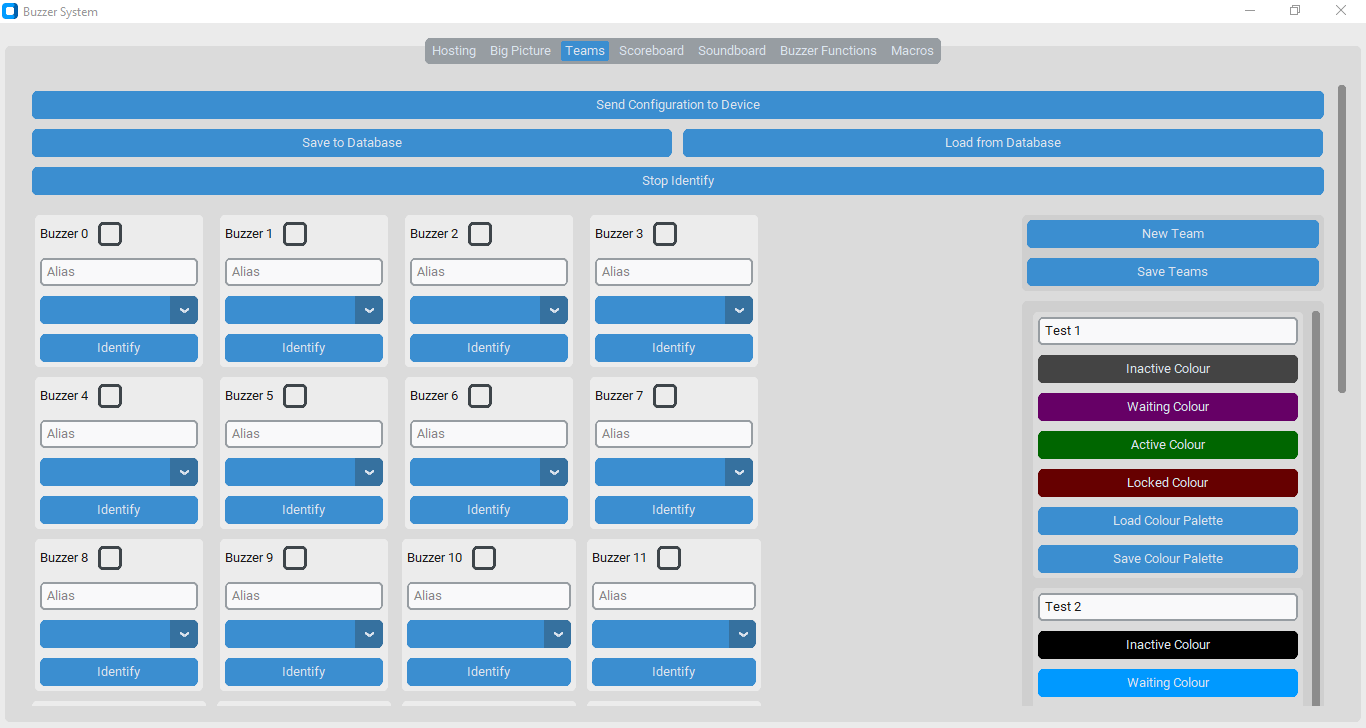
These buttons can be used to open and full screen the Big Picture display.

These buttons can be used to change the page that the Big Picture is displaying.

### Team Setup Tab

The Team Setup tab is the primary tab used during the event setup process. This tab is used to setup teams, and their colour palettes, as well as assigning buzzers their aliases and linking them to the correct team.

The Team Setup tab also provides the option to ‘Identify’ an individual buzzer. This will highlight it from the rest of the set. This function could be useful when introducing contestants, or to identify which alias to assign to which buzzer during the setup process. To remove the highlight from the buzzer, it is important to press the ‘Stop Identify’ button.



Setup individual buzzers.

Create teams and edit their names and colour palettes.

Stop identifying an individual buzzer.

Buttons to save and load existing configurations from the database.

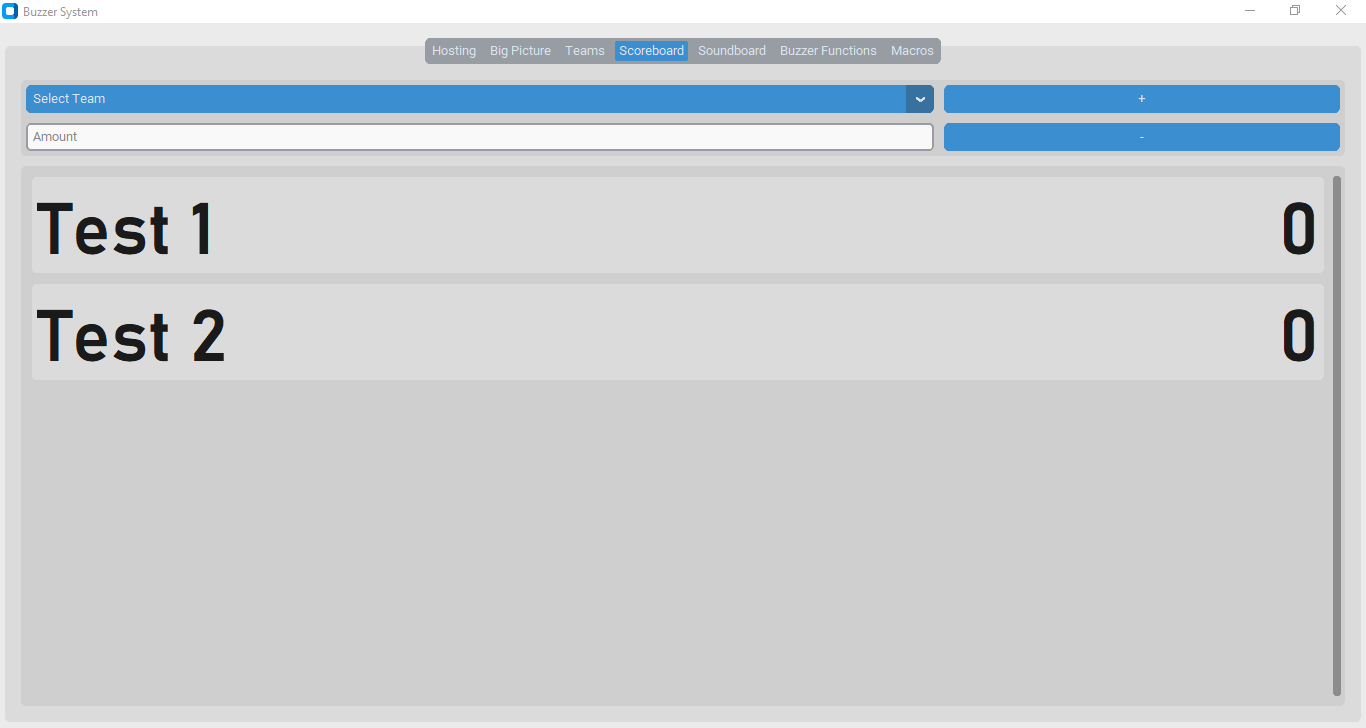
Send the displayed team configuration to the controller micro:bit, which starts the system. No changes will be saved unless this button is pressed.

### Scoreboard Tab

The scoreboard tab provides the host with a live view of the scores for each team.

Also, the host can manually adjust the scores by applying penalties or bonuses to a team as they wish.

Manually add or remove points from each team.

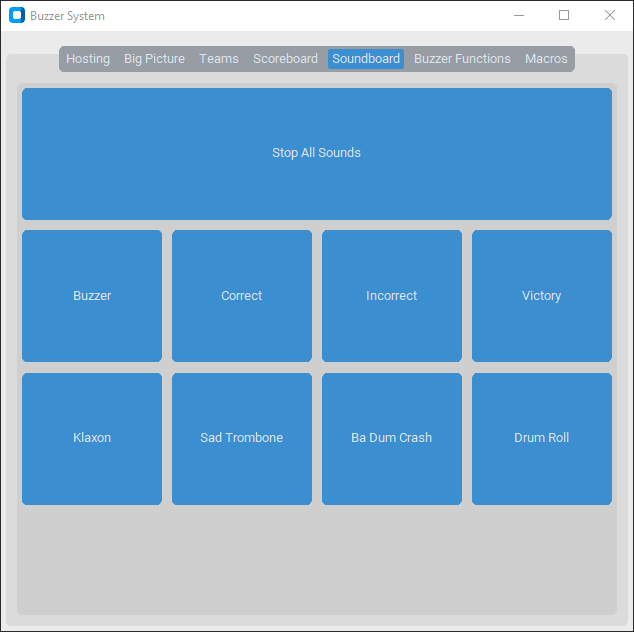


View the points that each team has, ordered from highest to lowest.

### Soundboard Tab

The soundboard tab simply gives the host to option to play sound effects to the audience. There are 8 sound effects available by default.

To stop a sound effect once it has started playing, press the ‘Stop All Sounds’ button.



Press a button to play the named sound effect.

### Buzzer Functions Tab

The Buzzer Functions tab contains some of the key functions for resetting and fine-tuning the operation of the buzzers during an event.

It only contains 5 buttons, but it is important to understand the affects of each of them.

Resend Configuration to Device – this instructs the controller to resend the configuration it currently has stored to each buzzer. This is most likely to be used if a new buzzer is added midway through the game (as the “Send Configuration to Device” in the Team Setup tab will reset the scores to 0, but this will not).

Lights On / Off– tell the buzzers to turn on or off their internal LEDs.

Update Lights– if a buzzer were to freeze and stop responding, this can be used to force it to update its state. If this fails to fix the problem, use “Resend Configuration to Device” above.

### Macros Tab

PASS

HERE BE MACROS

## 2.2 The Big Picture

The Big Picture is the audience’s primary view of an event. It can display titles, rounds, questions, scoreboards, and more.

The Big Picture Display is controlled through the Big Picture Configuration Tab.

Using the Big Picture Display is not compulsory but is recommended. If the Big Picture Display is not required, skip past the following tutorials.

### Setting Up the Display

1. To open the display, click ‘Open Big Picture’.
2. Drag the window to the appropriate monitor or display.
3. Click ‘Toggle Fullscreen’ to turn the window full screen.
4. Set the title for your event:
   1. Type the desired title value in the top text-entry box.
   2. Type the desired subtitle value in the bottom text-entry box.
   3. Press the “Save Changes” button.
   4. If not using a Question Set, press the “Display Title” button.
5. If using a Question Set, load it now (using the tutorial found in Section 2.3.2).

### Using the Display

When hosting an event,

## 2.3 Setting Up an Event

## 2.4 Hosting an Event